

# CLAIMS

1. A method of providing an arbitrary sound as an RBT (RingBack Tone) in a telephone communication network, comprising:

5        a first step, conducted by an exchanger when a call is received from a terminal, of checking subscriber information to know whether the calling terminal and a called terminal have subscribed to RBT replacement service, and, if it is confirmed from the checking that the calling terminal has  
10 subscribed to RBT replacement service and the called terminal is a subscriber of other telephone communication network, requesting a first trunk connection to said other telephone communication network while requesting a second trunk connection to a sound providing means with reference to preset  
15 routing information to the sound providing means;

      a second step, conducted by the sound providing means, of selecting an RBT-replacing sound set for the calling terminal based on information contained in the request of the second trunk connection, and providing the selected RBT-  
20 replacing sound for the calling terminal through the exchanger the second trunk connection is made to; and

      a third step, conducted by the exchanger, of releasing the second trunk connection by requesting the sound providing means to release the second trunk connection when call  
25 acceptance of the called terminal is informed via the first trunk connection.

2. The method of claim 1, wherein the confirmation that the called terminal is a subscriber of other telephone communication network is based on a prefix of telephone number  
30 dialed by the calling terminal.

3. A method of providing an arbitrary sound as an RBT

(RingBack Tone) in a telephone communication network,  
comprising:

a first step, conducted by an HLR (Home Location Register) when a location request message is received from a  
5 call-originating exchanger, of checking subscriber information to know whether a calling terminal and a called terminal have subscribed to RBT replacement service, and sending the call-originating exchanger a response message to the location  
request message, the response message containing information  
10 about RBT replacement service subscribed-or-not for the calling and the called terminal;

a second step, conducted by the call-originating exchanger, of requesting a first trunk connection to a call-terminating exchanger, and, if the information about RBT  
15 replacement service subscribed-or-not indicates that only the calling terminal has subscribed to RBT replacement service, requesting a second trunk connection to a sound providing means with reference to preset routing information to the sound providing means;

20 a third step, conducted by the sound providing means, of selecting an RBT-replacing sound set for the calling terminal based on information contained in the request of the second trunk connection, and providing the selected RBT-replacing sound for the calling terminal through the call-originating  
25 exchanger the second trunk connection is made to; and

a fourth step, conducted by the call-originating exchanger, of releasing the second trunk connection by requesting the sound providing means to release the second trunk connection when call acceptance of the called terminal  
30 is informed via the first trunk connection.

4. A method of providing an arbitrary sound as an RBT (RingBack Tone) in a telephone communication network,  
comprising:

a first step, conducted by an HLR (Home Location Register) when an origination request message is received from a call-originating exchanger, of checking subscriber information to know whether a calling terminal and a called  
5 terminal have subscribed to RBT replacement service, and sending the call-originating exchanger a response message to the origination request message, the response message containing information about RBT replacement service subscribed-or-not for the calling and the called terminal and  
10 routing information for a sound providing means;

a second step, conducted by the call-originating exchanger, of requesting a first trunk connection to the sound providing means with reference to the received routing information included in the response message, if the  
15 information about RBT replacement service subscribed-or-not indicates that only the calling terminal has subscribed to RBT replacement service; and

a third step, conducted by the sound providing means, of selecting an RBT-replacing sound set for the calling terminal  
20 based on information contained in the request of the first trunk connection, and transmitting the selected RBT-replacing sound for the calling terminal through the call-originating exchanger the first trunk connection is made to, and, if the called terminal is a subscriber of other telephone  
25 communication network, requesting a second trunk connection to said other telephone communication network, and, if call acceptance of the called terminal is informed via the second trunk connection, stopping transmission of the RBT replacing sound and connecting the first and the second trunk connection  
30 to make a communication path between the calling and the called terminal.

5. The method of claim 4, wherein the call-originating exchanger provides information about the calling and the

called terminal while requesting the first trunk connection.

6. The method of claim 5, wherein said information about the calling and the called terminal is telephone number.

7. The method of claim 4, wherein whether the called  
5 terminal is a subscriber of other telephone communication network is determined based on a prefix of telephone number dialed by the calling terminal.

8. A method of providing an arbitrary sound as an RBT (RingBack Tone) in a telephone communication network,  
10 comprising:

a first step, conducted by an HLR (Home Location Register) when a location request message is received from a call-originating exchanger, of checking subscriber information to know whether a calling terminal and a called terminal have  
15 subscribed to RBT replacement service, and sending a call-terminating exchanger a routing information request message including service-related information that contains information about RBT replacement service subscribed-or-not for the calling and the called terminal and routing  
20 information for a sound providing means;

a second step, conducted by the call-terminating exchanger when a first trunk connection request is received from the call-originating exchanger, of requesting a second trunk connection to a sound providing means based on the  
25 received service-related information, if it is confirmed from the service-related information that only the calling terminal has subscribed to RBT replacement service;

a third step, conducted by the sound providing means, of selecting an RBT-replacing sound set for the calling terminal  
30 based on information contained in the request of the second trunk connection, and providing the selected RBT-replacing sound for the calling terminal through the call-originating exchanger; and

a fourth step, conducted by the call-terminating exchanger, of releasing the second trunk connection by requesting the sound providing means to release the second trunk connection when a call is accepted by the called  
5 terminal.